

# Study Calendar 2013B

## SM358 The quantum world



Study week	Start date	Book/Chapter	Other Components	Assignment Number	*Cut-off date / Recommended completion date
1	2 Feb	<b>Book 1 Wave mechanics</b> Chapter 1 The quantum revolution			
2	9 Feb	Chapter 1 continued Chapter 2 Schrödinger's equation and wave functions		iCMA Maths	11 Feb
3	16 Feb	Chapter 2 continued			
4	23 Feb	Chapter 3 Particles in boxes	DVD: One-dimensional wells		
5	2 Mar	Chapter 3 continued Chapter 4 The Heisenberg uncertainty principle			
6	9 Mar	Chapter 4 continued	DVD: Tutorial problem 1 (video)		
7	16 Mar	Consolidation			
8	23 Mar	Chapter 5 Simple harmonic oscillators		iCMA 51	25 Mar
9	30 Mar	Chapter 6 Wave packets and motion	DVD: Wave packets in wells	TMA 01	2 Apr
10	6 Apr	Chapter 6 continued Chapter 7 Scattering and tunnelling	DVD: Free-particle wave packets DVD: Scattering of wave packets		
11	13 Apr	Chapter 7 continued	DVD: Stationary states for scattering and tunnelling DVD: STM (software+video)		
12	20 Apr	<b>Book 2 Quantum mechanics and its interpretation</b> Chapter 1 A new language for quantum mechanics			
13	27 Apr	Chapter 1 continued Chapter 2 Introduction to angular momentum	DVD: Stern-Gerlach experiment (video)		
14	4 May	Chapter 2 continued		iCMA 52	7 May
15	11 May	Consolidation			
16	18 May	Chapter 3 Spin angular momentum	DVD: Tutorial problems 2 and 3 (video)	TMA 02	20 May
17	25 May	Chapter 3 continued Chapter 4 Many-particle systems and indistinguishability			
18	1 Jun	Chapter 4 continued			
19	8 Jun	Chapter 5 The principles of quantum mechanics: a review		iCMA 53	10 Jun
20	15 Jun	Chapter 6 Entanglement and the EPR 'paradox'	DVD: Ghostly action at a distance (video)		
21	22 Jun	Chapter 6 continued Chapter 7 Quantum information	DVD: Quantum information (video)		
22	29 Jun	Chapter 7 continued			
23	6 Jul	Consolidation			
24	13 Jul	<b>Book 3 Quantum mechanics of matter</b> Chapter 1 Angular momentum	DVD: Spherical harmonics	iCMA 54	15 Jul
25	20 Jul	Chapter 2 The hydrogen atom	DVD: Hydrogen atom wave functions DVD: Orbital viewer	TMA 03	22 Jul
26	27 Jul	Chapter 3 Time independent approximations			
27	3 Aug	Chapter 4 Hydrogen-like systems			
28	10 Aug	Chapter 5 Many-electron atoms			
29	17 Aug	Consolidation		iCMA 55	19 Aug
30	24 Aug	Chapter 6 Diatomic molecules	DVD: Orbital viewer		
31	31 Aug	Chapter 7 Solids		TMA 04	2 Sep
32	7 Sep	Chapter 8 Light and matter			
33	14 Sep			iCMA 56 Final cut-off date for iCMA 53-56	23 Sep iCMA 51-56 7 Oct

\*Cut-off date (TMAs, iCMAs 51-52) / Recommended completion date (iCMA Maths, iCMAs 53-56)

**Continuous assessment component:** Formative. Threshold of 30% on 7 of the 10 core iCMAs/TMAs (including 2 TMAs). **Substitution:** N/A